

S.N.: 10/600,549
Art Unit: 2187

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

Listing of Claims:

1. (Currently Amended) An apparatus for updating ~~update~~ of cache data in a storage system, the apparatus comprising:

a memory for storing data;

a cache for storing data associated with the memory;

at least one processor for preparing change data for updating the cache, the at least one processor comprising circuitry for

submitting a request for change to the memory,

receiving a signal from the memory representative of completion of the request for change; and

updating the cache with the change data in response to the signal indicating successful completion of the request for change.

2. (Previously Presented) The apparatus of claim 1 wherein the data comprises configuration data.

3. (Previously Presented) The apparatus of claim 1 wherein the storage system comprises a disk storage subsystem.

4. (Previously Presented) The apparatus of claim 3 wherein the memory is comprised in a disk adapter.

5. (Previously Presented) The apparatus of claim 3 wherein the memory is comprised in a disk controller.

S.N.: 10/600,549
Art Unit: 2187

6. (Previously Presented) The apparatus of claim 1 further comprising an interconnect coupled between the memory and the cache for communicating the request for change, and the signal representative of completion of the request for change.

7. (Currently Amended) The apparatus of claim 6 [4] wherein the interconnect is also arranged to communicate transaction data.

8. (Previously Presented) The apparatus of claim 6 wherein the interconnect comprises a device driver.

9. (Currently Amended) A method for updating ~~update~~ of cache data in a storage system, the method comprising:

providing a memory holding data;

providing a cache holding data associated with the memory;

preparing change data for updating the cache;

submitting a request for change to the memory;

receiving a signal from the memory representative of completion of the request for change; and

updating the cache with the change data in response to the signal indicating successful completion of the request for change.

10. (Original) The method of claim 9 wherein the data comprises configuration data.

11. (Original) The method of claim 9 wherein the storage system comprises a disk storage subsystem.

12. (Previously Presented) The method of claim 9 wherein the memory is comprised in a disk adapter.

13. (Previously Presented) The method of claim 9 wherein the memory is comprised in a disk controller.

S.N.: 10/600,549
Art Unit: 2187

14. (Previously Presented) The method of claim 9 further comprising providing an interconnection coupled between the memory and the cache for communicating the request for change, the signal representative of completion of the request for change.

15. (Previously Presented) The method of claim 14 wherein the interconnection also communicates transaction data.

16. (Previously Presented) The method of claim 14 wherein the interconnection comprises a device driver.

17. (Currently Amended) A computer program storage device readable by a machine and comprising executable computer program instructions for updating ~~update~~ of a cache in a storage system, the storage system comprising a memory holding data and a cache holding data associated with the memory, the instructions for performing the method of:

preparing change data for updating the cache;

submitting a request for change to the memory;

receiving a signal from the memory representative of completion of the request for change; and

updating the cache with the change data in response to the signal indicating successful completion of the request for change.

18. (Currently Amended) An apparatus for updating ~~update~~ of cache data in a storage system, the apparatus comprising:

memory means for holding data;

cache means for holding data associated with the memory means;

means for preparing change data for updating the cache means;;

means for submitting a request for change to the memory means;;

S.N.: 10/600,549
Art Unit: 2187

means for receiving a signal from the memory means representative of completion of the request for change; and

means for updating the cache means with the change data in response to the signal indicating successful completion of the request for change.

19. (Previously Presented) In a system comprising a host coupled to a storage subsystem, a method for operating a write-through cache with a two phase commit technique for logical configuration cache update, comprising:

during phase one, and in response to a submission of a configuration change transaction, constructing a request; and

preparing change data for the cache and storing the prepared change data as a change pending for the cache;

sending the request for processing;

upon receipt of the completed request, checking a return code to determine success or failure of the request; and

if the request completed successfully, the change data is applied to the cache for updating the cache with the contents of the storage subsystem, thereby executing phase two of the two-phase commit procedure; else

if the request failed, the change data is deleted without being applied to the cache.

20. (Previously Presented) In a system comprising a host coupled to a storage subsystem, the host comprising a write-through cache, said host further comprising a programmed data processor for operating the write-through cache with a two phase commit technique for logical configuration cache update, said data processor operating during a first phase, in response to a submission of a configuration change transaction, for constructing a request and for preparing and storing change data for the cache as a change pending for the cache; said data processor sending the request for processing and, responsive to a receipt of a completed request, checking a return code to determine success or failure of the request; said data processor being responsive to a condition

S.N.: 10/600,549
Art Unit: 2187

where the request completed successfully for applying the change data to the cache for updating the cache with the contents of the storage subsystem, thereby executing phase two of the two-phase commit procedure; else said data processor is responsive to said request failing for deleting the change data without applying the change data to the to the cache.

21. (Previously Presented) The host of claim 20, where said host is coupled to said storage subsystem through an adapter.